Signature

PTO/SB/05 (01-04)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## UTILITY PATENT APPLICATION **TRANSMITTAL**

9256 USA-NONP Attorney Docket No. Paul Edward Arch First Inventor Foamable Interpolymer Resin Particles Containing Limonene as a Blowing Aid

Express Mail Label No. EU700538139US

Date

(Only for new nonprovisional applications under 37 CFR 1.53(b))

See MPEP	APPLICATION ELEMENTS chapter 600 concerning utility patent application contents.	ADDRESS TO:  Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450					
2. Submi Applic See 3 Specifi (preferi - Desci - Cross - State - Referi - Briefi - Detai - Clairr - Abstr  4. Drawii  5. Oath or Deci a. Ne b. Co (for	act of the Disclosure  ng(s) (35 U.S.C. 113) [Total Sheets]	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a. Computer Readable Form (CRF)  b. Specification Sequence Listing on:  i. CD-ROM or CD-R (2 copies); or  ii. Paper  c. Statements verifying identity of above copies  ACCOMPANYING APPLICATION PARTS  9. Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement Power of (when there is an assignee) Attorney 11. English Translation Document (if applicable) 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations 13. Preliminary Amendment 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. Other: Declaration, signed.	008001/01				
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:							
Continuation  Divisional  Continuation-in-part (CIP)  of prior application No.:  Prior application information:  Examiner  For CONTINUATION OR DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.  19. CORRESPONDENCE ADDRESS							
Customer Number:  OR Correspondence address below							
Name	Suzanne Kikel						
Address	NOVA Chemicals Inc.						
	400 Frankfort Road	Clate					
City	Monaca	State PA Zip Code 15061					
Country	COA	Felephone (724)770-4339 Fax 724-770-5601					
Name (Print/Type)   Suzanne Kikel   Registration No. (Attorney/Agent)   28,230							

This collection of information is required by 37 CFR 1.53(b) the information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTA	.	Complete if Known						
FEE IKANSIVIIIIA	L	Application Number						
for FY 2004		Filing Date						
		First Named Inventor Paul Ed		dward Arch				
Effective 10/01/2003. Patent fees are subject to annual revision		Examiner Name						
Applicant claims small entity status. See 37 CFR 1.27		Art Unit						
TOTAL AMOUNT OF PAYMENT (\$) 770.00		Attorney Docket No. 9256 USA-NONP			<del></del> -			
METHOD OF DAYMENT (short shifted south)	<u> </u>							
METHOD OF PAYMENT (check all that apply)		FEE CALCULATION (continued)						
Check Credit card Money Other None		3. ADDITIONAL FEES Large Entity   Small Entity						
Peposit Account:	Fee	Fax Fax Fax Fax						
Deposit Account 501679	Cod	e (\$)	Code		ree	Description	Fee Paid	
Number Deposit	1051		2051			e filing fee or oath		
Account	1052	2 50	2052	25	Surcharge - lat cover sheet	e provisional filing fee or		
Name The Director is authorized to: (check all that apply)	1053		1053		Non-English sp			
Charge fee(s) indicated below Credit any overpayments	į .	2,520				uest for ex parte reexamination		
Charge any additional fee(s) or any underpayment of fee(s)	1804	920*	1804	920*	Requesting pul Examiner actio	olication of SIR prior to n	<u>                                     </u>	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1805	1,840*	1805	1,840*	Requesting pu Examiner action	blication of SIR after		
FEE CALCULATION	1251	110	2251	55		eply within first month		
1. BASIC FILING FEE	1252	420	2252	210	Extension for i	reply within second month		
Large Entity Small Entity	1253	950	2253	475	Extension for	reply within third month	<u> </u>	
Fee Fee Fee Fee Fee Description Fee Paid Code (\$)	1254	1,480	2254	740	Extension for I	eply within fourth month		
1001 770 2001 385 Utility filing fee 770.00	1255	2,010	2255	1,005	Extension for I	eply within fifth month	<u> </u>	
1002 340 2002 170 Design filing fee	1401	330	2401	165	Notice of Appe	eal		
1003 530 2003 265 Plant filing fee	1402		2402			support of an appeal		
1004 770 2004 385 Reissue filing fee	1403		2403		Request for or	· ·		
1005 160 2005 80 Provisional filing fee		1,510	1451	•		tute a public use proceeding	———I	
SUBTOTAL (1) (\$) 770.00	1452	110	2452 2453			ve - unavoidable		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE		1,330	2501		Utility issue fee	ve - unintentional		
Fee from Ext <u>ra Claims below Fee Paid</u>	1502		2502		Design issue f	,		
Total Claims 18 -20** = X = 0	1503	640	2503	320	Plant issue fee	•		
Claims Multiple Dependent	1460	130	1460	130	Petitions to the	e Commissioner		
	1807	50	1807	50	Processing fee	e under 37 CFR 1.17(q)		
Large Entity   Small Entity Fee Fee   Fee Fee Fee Description	1806	180	1806			Information Disclosure Stmt		
Code (\$) Code (\$)	8021	40	8021	40	Recording each	h patent assignment per s number of properties)		
1202 18 2202 9 Claims in excess of 20	1809	770	2809		Filing a submis	ssion after final rejection		
1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claim, if not paid	4040		2040		(37 ČFR 1.129	,	<b>├──┤╽</b>	
1204 86 2204 43 ** Reissue independent claims	1810	770	2810	385		tional invention to be CFR 1.129(b))	<u> </u>	
over original patent	180	1 770	2801	385	Request for C	Continued Examination (RCE)		
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802	2 900	1802	900	Request for e	expedited examination		
SUBTOTAL (2) (\$)	Othe	Other fee (specify)						
**or number previously paid, if greater; For Reissues, see above	educed by Basic Filing Fee Paid SUBTOTAL (3) (\$)							
SUBMITTED BY (Complete (if applicable))								
Name (Print/Type) Suzanne Kikel		Registration No. (Attorney/Agent) 28,230 Telephone 724-770-4339						
Signature Un firme This	I	Muorney	Ayen)			Date Oan 2	2 21/4	

WARNING Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## NON-PROVISIONAL APPLICATION FOR PATENT

**INVENTORS:** 

Paul Edward Arch Edwin H. Niemann

TITLE:

FOAMABLE INTERPOLYMER RESIN PARTICLES CONTAINING LIMONENE AS A BLOWING AID

DOCKET NO.:

**9256 USA NONP** 

EXPRESS MAIL CERTIFICATE

DATE OF DEPOSIT:

**EXPRESS MAIL NO.:** 

EU700538139US

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED IN THE UNITED STATES POSTAL SERVICE AS EXPRESS MAIL "POST OFFICE TO ADDRESSEE" BEFORE 5:00 P.M. ON THE ABOVE DATE IN AN ENVELOPE ADDRESSED TO MAIL STOP: PATENT APPLICATION, COMMISSIONER FOR PATENTS, P.O. Box 1450 ALEXANDRIA, VA. 22313-1450

MALLED BY

## Patent

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

5	In Re Application of:	) Examiner: Unknown					
	ARCH, Paul Edward NIEMANN, Edwin H.	) ) )					
10		) Art Unit: Unknown					
10		) Attorney Docket No. 9256 USA-NONP					
	Entitled:						
15	Foamable Interpolymer Resin Limonene as a Blowing Aid	Particles Containing					
	LETTE	<u>2</u>					
20		NOVA Chemicals Inc. 400 Frankfort Road Monaca, PA 15061 January 23, 2004					
25	MAIL STOP: Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA. 22313-1450						
30	Please file the enclosed application in the United States Patent and Trademark Office. Enclosed are the following:  1. Transmittal letter.  2. Utility Patent Application Transmittal.  3. Fee Transmittal Sheet in Duplicate.  4. Application including Description and Claims						
35	<ol> <li>Application including Description and Claims</li> <li>Declaration including Inventorship Information.</li> <li>Express Mail Certificate.</li> <li>Post Card.</li> </ol>						

Respectfully submitted,

Suzanne Kikel Agent for Applicants

Reg. No. 28,230

724 770-4339